

MESSENGER-INQUIRER

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|  | University of Kentucky College of Agriculture, Food and Environment <i>Cooperative Extension Service</i> |
|  | extension.ca.uky.edu HORTICULTURE EDUCATION Annette Meyer Heisdorffer, PhD Daviness County Extension Office |

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Prevent Mosquitoes from Biting You

The buzzing noise in my ear is annoying. Yes, the mosquito is getting ready to find a meal. By taking the time to remove standing water from now through most of fall, their life cycle is disturbed, and the population is reduced. By understanding their life cycle and ways to protect yourself, the number of mosquito encounters is reduced.

By disrupting the life cycle of mosquitoes, their populations can be decreased. Adult females lay eggs near or along the edges of water or in areas where water accumulates. The eggs hatch and resulting larvae, called “wrigglers” because of their movement in water, come to the surface to breathe. From this stage, it may take one week for them to develop into biting adults, depending on the species and temperature.

Eliminating standing water interrupts their life cycle. Remember, water-holding sites are not always obvious.

Look at pet dishes and think about flowerpot drainage saucers. These need to be emptied every two days as the temperature rises. The water in birdbaths and summer wading pools should be changed at least once a week. Also, plan on cleaning and chlorinating swimming pools, outdoor saunas, and hot tubs.

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Tires are primary mosquito breeding areas. Remove and dispose of them. More information about proper disposal for consumers can be found at the Kentucky Energy and Environment Cabinet: <https://eec.ky.gov/Environmental-Protection/Waste/recycling-and-local-assistance/waste-tires/Pages/default.aspx>. Also, contact the Daviess County Landfill.

Remove empty tin cans, plastic containers, soda cans, plastic sheeting, and the like. Continue to watch for these items throughout the summer. Turn over wheelbarrows when not in use.

Standing water in roof gutters can produce millions of mosquitoes each season. Carefully clean clogged gutters now. Be sure to periodically inspect gutters to make sure they drain properly.

Check all faucets, air conditioner units and condensation drains, cisterns, cesspools, and septic tanks for water puddles that remain for several days. Eliminate any puddles that form. In addition, watch for and repair any leaks.

Consider stocking ornamental pools with mosquito fish, which include predacious minnows. In the ornamental pool, keep the banks steep to enable fish to reach the wrigglers instead of having a gradual drop-off.

To prevent water accumulation in landscapes, gardens, and lawns, irrigate sufficiently for good growth but not to the point that water stands for several days. Monitor the irrigation system to avoid overwatering during periods of rain.

Tremendous numbers of mosquitoes can breed in shallow, marshy or swampy locations, ditches, and other low areas. Draining or filling these areas is an effective long-term solution. If it's not possible to eliminate standing water in all these situations, consider using a mosquito-

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specific larvicide. Larvicide is an insecticide used to control immature mosquitoes. Larvicides contain the active ingredient methoprene (an insect growth regulator) or the bacterial toxin produced by *Bacillus thuringiensis israeliensis*. These products are essentially harmless to fish, wildlife, and other non-target organisms. The easy-to-apply products come in water-soluble granules, pellets, or briquettes and are usually available from farm supply stores, garden centers, pesticide dealers, and online. Always read the product label and use it according to the directions provided. Remember, the label is the law.

Gimmicks advertised in print and electronic media are generally ineffective. These include ultrasonic devices, mosquito-repelling plants, or garlic. Traps that capture large numbers of mosquitoes have not been proven effective at eliminating pest bites, even though they might capture impressive numbers of mosquitoes.

Citronella oil does have mosquito-repelling properties, and the scented candles can provide a degree of protection if multiple candles are placed within a few feet of where people are sitting. A single candle at the center or edge of a picnic table probably won't provide much benefit other than atmosphere.

West Nile Virus is a disease carried by mosquitos that can be found in this area during summer and fall. Mosquitoes become West Nile Virus carriers when they bite infected birds. The virus eventually moves to the mosquitoes' salivary glands. Then, it can be injected into bitten humans and animals, where the virus can multiply and possibly cause illness.

According to the Center for Disease Control and Prevention, if a mosquito infected with West Nile Virus bites someone, only about 1 out of 150 people become severely ill. In addition, the CDC says that the West Nile Virus is not transmitted through coughing, sneezing, or

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touching. The virus is not spread by handling live or dead infected birds, either, but you should still always avoid picking up dead birds bare-handed. For more information on symptoms and other facts about this virus, go to the CDC's website at <https://www.cdc.gov/westnile/>.

One of the mosquitoes found in KY is the Asian tiger mosquito (*Aedes albopictus*). This mosquito is active during early morning and late afternoon and stays within about 250 yards of their breeding site. This species is responsible for most of the mosquito bites that occur in city suburbs.

To reduce the number of bites from mosquitoes after eliminating standing water, stay indoors between 4:00 and 8:00 p.m., if possible, when they are most active. Also, wear pants and long-sleeved shirts when outdoors. Use an EPA-registered insect repellent.

For more information on managing mosquitoes, contact the Daviess County Cooperative Extension Service through email at annette.heisdorffer@uky.edu. The fact sheet "Mosquitoes: Practical Advice for Homeowners" is available on the web at <http://entomology.ca.uky.edu/files/efpdf1/ef005.pdf>.

Annette's Tips:

A search tool to determine the right insect repellent for mosquitoes for you is found at <https://www.epa.gov/insect-repellents/find-insect-repellent-right-you>. You can specify the: target pest, protection time desired, active ingredient, or other product-specific information. For children, it is best to contact your pediatrician for suggestions.

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